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# (12) United States Patent

#### Okamura et al.

# (54) CORROSION INHIBITOR INJECTING METHOD

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See application file for complete search history.

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### (57) ABSTRACT

A method for injecting a corrosion inhibitor injecting an oxidant and an anticorrosive agent-pH adjusting agent complex including an anticorrosive agent and a pH adjusting agent adsorbed on a surface of the anticorrosive agent into high temperature water in contact with a surface of a metal structural material and irradiating the high temperature water with a radioactive ray or an ultraviolet ray, wherein the anticorrosive agent of the anticorrosive agent-pH adjusting agent complex has, on the surface of the anticorrosive agent, an active site where the pH adjusting agent reacts with the oxidant, and the pH adjusting agent present on the surface of the anticorrosive agent of the anticorrosive agent-pH adjusting agent complex and/or in the high temperature water is oxidized with the oxidant by the irradiation with the radioactive ray or the ultraviolet ray to change pH adjusting ability of the pH adjusting agent and shift a pH of the high temperature water to a neutral side, and thereby deposition of the anticorrosive agent 11 to the metal structural material 65 is accelerated.

#### 18 Claims, 10 Drawing Sheets

